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*ABSTRACT*

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### **AIM:**

To design an implant angulation positioning device for radiographic and surgical placement of dental implant, as the angulation plays a vital role in prosthetic loading and aesthetic outcome.

### **MATERIALS AND METHODS:**

An implant angulation position device was designed for implant placement in partial and completely edentulous area in planned buccopalatal/ lingual angulations, A surgical stent was designed using guide sleeves in thermo vacuum press, which was evaluated for radiographic and surgical implant angulations. 10 implants in alloplastic models and 2 clinical cases were evaluated for implant angulations.

### **RESULTS:**

The tabulated results for the determined and achieved angulations were calculated statistically. The results showed that the mean percentage error between the determined and achieved angulations was  $0.048^\circ$ , and no statistical significance under Student 'T' test.

### **CONCLUSION:**

An angulation positioning device and a dual purpose surgical stent was designed as completely limiting design stent and evaluated. The results showed no significance between determined and achieved angulations.

### **KEYWORDS:**

Implant, angulation, angulation positioning device, stent.